

REMARKS/ARGUMENTS

The Applicants originally submitted Claims 1-21 in the application. In previous responses, the Applicants amended Claims 1-2, 4-6, 8-9, 11-13, 15-16 and 18-20. In the present response, the Applicants have amended Claims 1, 4, 8, 11, 15 and 18 to clarify the previous amendment and place the claims in condition for allowance. (See Examiner's Final Rejection, point 27, page 12.) Support for the amendment can be found in paragraph 68 of the original specification. The Applicants have not amended, canceled or added any other claims in the present response. Accordingly, Claims 1-21 are currently pending in the application.

I. Rejection of Claims 1-14 under 35 U.S.C. §103

The Examiner has rejected Claims 1-14 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,933,627 to Parady in view of Microware's OS-9 White Paper. The Applicants respectfully disagree.

As recognized by the Examiner, Parady does not teach a miss fulfillment FIFO or, based on a context switch request, storing a thread executing within a multi-thread execution pipeline loop in the miss fulfillment FIFO to prevent the thread from executing until a device request from the thread is fulfilled as recited in independent Claims 1 and 8. To cure this deficiency, the Examiner cites OS-9. (See Examiner's Final Rejection, pages 3-5.)

OS-9 provides a prioritized, round-robin scheduling algorithm with aging to allocate CPU time for processes. (See page 5.) In OS-9, a process that is running may yield for a specific condition to occur. The yielded process is stored in one of several queues depending on what condition the process is waiting. (See page 5.)

The queues in OS-9, however, are not a miss fulfillment FIFO as recited in independent Claims 1 and 8. More specifically, unlike the miss fulfillment FIFO of amended Claims 1 and 8, processes that enter the queues of OS-9 do not sequence through the entire queues before exiting therefrom. Instead, the queues of OS-9 are general storage areas that hold a process until a child process terminates, the process is awakened, an event value is received or a semaphore is received. (See page 5.) Thus, OS-9 does not teach or suggest storing a thread in a miss fulfillment FIFO until a device request is fulfilled, wherein the thread sequences through the entire miss fulfillment FIFO before exiting therefrom as recited in amended independent Claims 1 and 8.

The cited combination of Parady and OS-9, therefore, does not teach or suggest each and every element of amended independent Claims 1 and 8 and does not provide a *prima facie* case of obviousness of these independent Claims and Claims dependent thereon. Accordingly, Claims 1-14 are not unpatentable in view of Parady and OS-9. Thus, the Applicants respectfully request the Examiner to withdraw the §103(a) rejection with respect to Claims 1-14 and allow issuance thereof.

II. Rejection of Claims 15-21 under 35 U.S.C. §103

The Examiner has rejected Claims 15-21 under 35 U.S.C. §103(a) as being unpatentable over Parady in view of OS-9 and in further view of U.S. Patent No. 5,509,006 to Wilford, *et al.* The Applicants respectfully disagree.

As discussed above regarding independent Claims 1 and 8, the cited combination of Parady and OS-9 does not teach or suggest storing a thread in a miss fulfillment FIFO until a device request is fulfilled, wherein the thread sequences through the entire miss fulfillment FIFO

before exiting therefrom as also recited in independent Claim 15. Wilford has not been cited to cure this deficiency of Parady but to teach tree engines that parse data. (See Examiner's Final Rejection, page 9.) Furthermore, Wilford does not cure the deficiencies of Parady and OS-9 but is directed to providing a specialized apparatus capable of switching packets at high speed. (See Wilford, column 1, lines 65-66.) Thus, the cited combination of Parady, OS-9 and Wilford does not teach or suggest each and every element of independent Claim 15 and, as such, does not provide a *prima facie* case of obviousness of Claim 15 and Claims dependent thereon. Accordingly, the Applicants respectfully request the Examiner to withdraw the §103(a) rejection and allow issuance of Claims 15-21.


III. Conclusion

In view of the foregoing amendment and remarks, the Applicants now see all of the Claims currently pending in this application to be in condition for allowance and therefore earnestly solicit a Notice of Allowance for Claims 1-21.

The Applicants request the Examiner to telephone the undersigned attorney of record at (972) 480-8800 if such would further or expedite the prosecution of the present application. The Commissioner is hereby authorized to charge any fees, credits or overpayments to Deposit Account 08-2395.

Respectfully submitted,

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